

Remarks

Claim 1, 2, 8-22, 24 and 31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Heim (US 2005/0151368) in view of Mayer (US 6,565,770).

This rejection is respectfully traversed and submitted to be inapplicable to the claims for the following reasons.

Claim 1 is patentable over the combination of Heim and Mayer, since claim 1 recites a forgery-proof security element including, in part, a first layer formed of metal clusters located on a first side of a polymeric spacer layer, and a second layer formed of metal clusters located on a second side of the polymeric spacer layer, the second side being opposite to the first side. The combination of Heim and Mayer fails to disclose or suggest the first and second layers formed of metal clusters as recited in claim 1.

Heim discloses a security element 2 having a layered structure including a transparent substrate S, an absorber layer A2, a dielectric layer D and an absorber layer A1. The absorber layers A1, A2 can be formed by physical vapor deposition (PVD) or chemical vapor deposition (CVD). (See paragraphs [0017], [0021], [0057], [0058] and [0063] and Figure 5).

In the rejection, the absorber layers A1, A2 are relied upon as corresponding to the claimed first and second layers. However, the claimed first and second layers A1, A2 are specifically recited as being formed of metal clusters. On the other hand, the absorber layers A1, A2 are not formed of metal clusters, but are continuous layers. This is clearly illustrated in Figure 5 of Heim. Further, the rejection implies that, since the absorber layers A1, A2 are formed by vapor deposition, the absorber layers A1, A2 are necessarily formed of metal clusters. This is not accurate because vapor deposition can be used to form a continuous layer as evidenced by Figure 5. Therefore, Heim does not disclose or suggest the claimed first and second layers formed of metal clusters as recited in claim 1.

Regarding Mayer, it is relied upon in the rejection as disclosing dielectric layers 54a, 54b formed of a polymer. Mayer also discloses absorber layers 56a, 56b formed on the dielectric layers 54a, 54b. The absorber layers 56a, 56b can be formed by vapor deposition or sputtering. (See column 8, lines 29-44; column 14, lines 27-47; column 16, lines 27-44; and Figure 2).

While Mayer also discloses the absorber layers 56a, 56b formed by vapor deposition (or sputtering), it is clear that, like Heim, Mayer fails to disclose or suggest that the absorber layers

56a, 56b are formed of metal clusters. Instead, Figure 2 of Mayer clearly illustrates that the absorber layers 56a, 56b are formed as a continuous sheet and not a series of metal clusters. Therefore, Mayer fails to address this deficiency of Heim. As a result, claim 1 is patentable over the combination of Heim and Mayer.

Claim 7 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Heim in view of Mayer and further in view of Chen (US 4,792,667).

Regarding this rejection, Chen fails to address the deficiency noted above with regard to the combination of Heim and Mayer. Therefore, claim 7 is patentable over the combination of Heim, Mayer and Chen based at least on its dependency from claim 1.

Claims 23 and 25 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Heim in view of Mayer and further in view of Adamczyk (US 2004/0050269).

Regarding this rejection, Adamczyk fails to address the deficiency noted above with regard to the combination of Heim and Mayer. Therefore, claims 23 and 25 are patentable over the combination of Heim, Mayer and Adamczyk based at least on their dependency from claim 1.

Regarding withdrawn claims 3-6, 26-30 and 32-35, it is submitted that these claims should be given due consideration based on their dependency from allowable claim 1.

Because of the above-mentioned distinctions, it is believed clear that claims 1-35 are allowable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1-35. Therefore, it is submitted that claims 1-35 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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